

CLAIMS:

1. A fixture assembly for temporarily holding printed circuit boards of the type having a primary and secondary surfaces and surface-mounted components thereon and leads extending therefrom, said fixture comprising:

- 5 (a) a first plate having an outer perimeter and an inner perimeter, said inner perimeter conforming to the configuration of the PCBA, said first plate having a thickness generally corresponding to that of the PCBA;
- (b) a second plate having an outer perimeter and defining at least one aperture positioned to register with a lead on said PCBA; and
- (c) fastener means detachably securing said first and second plates in a fixture assembly.

15 2. The fixture of Claim 1 further including a third plate having at least one cut-out corresponding to the location of a surface-mounted component, said third plate being interposed between said first and second plates wherein said cut-out form a cavity with said second plate.

20 3. The fixture of Claim 1 wherein said plates each are a laminate structure.

4. The fixture of Claim 1 wherein said plates are fabricated from a non-metal material.

5. The fixture of Claim 2 further including weighting means for applying a holding force to said PCBA when in said assembly.

6. The fixture of Claim 5 wherein said weighting means comprises a fourth plate having 5 positioning means to position it over said PCBA in said fixture assembly and adjustable projection means engageable with the primary surface of the PCBA.

7. The fixture of Claim 1 wherein said second plate is comprised of at least two laminae and wherein each said plate defines holes which when assembled form an aperture of 10 downwardly increasing size to facilitate flow of solder to the leads.

8. A method of wave soldering comprising:

15 (a) providing a first plate having an outer perimeter and an inner perimeter, said inner perimeter conforming to the configuration of the PCBA, said first plate having a thickness corresponding to the PCBA;

(b) providing a second plate having an outer perimeter and defining at least one aperture positioned to register with a lead on said PCBA;

(c) detachably securing said first and second plates in an assembly;

(d) positioning said PCBA within the inner perimeter of said first plate with leads 20 extending through said aperture; and

(e) passing said fixture and PCBA through a wave soldering apparatus to expose said lead to solder.